UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,278	05/08/2001	Thomas M. Rothwein	M-11555 US	3426

33031   7590   07/16/2003

CAMPBELL STEPHENSON ASCOLESE, LLP
4807 SPICEWOOD SPRINGS RD.
BLDG. 4, SUITE 201
AUSTIN, TX 78759

EXAMINER
PHAM, KHANH B

ART UNIT	PAPER NUMBER
2177	4

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/851,278	Applicant(s) ROTHWEIN ET AL.
	Examiner Khanh B. Pham	Art Unit 2177

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _08 May 2001_ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-25_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-25_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4)☐ Interview Summary (PTO-413) Paper No(s). _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: .

DETAILED ACTION

Specification

1.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

Claims 6-10 are rejected under **35 U.S.C. 101** because the claimed invention is

directed to non-statutory subject matter. Claims 6-10 are directed to " **a hierarchical**

class architecture of object", which is a non-statutory subject matter.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

4.   **Claims 1-25 are rejected under 35 U.S.C. 102(e)** as being anticipated by Greef

et al. (US 6,397,221 B1), hereinafter referred to as "Greef".

As per claim 1, Greef teaches a method of arranging objects comprising:

- "setting a class hierarchy, wherein the class hierarchy comprises an upper level

  class and a lower level class" at Fig. 3;

- "the objects are members of at least one of the upper level class and the lower

  level class" at Fig. 3;

- "assigning an attribute to the top level class, wherein the attribute describes the

  objects" at Fig. 3, element 94;

- "inheriting of the attribute by the lower level class" at Col. 12 lines 10-40 and

  Figs. 3-4.

As per claim 2, Greef teaches the method of arranging objects of claim 1, further

comprising: "assigning an attribute to the lower level class, the attribute describing an

object that is a member of the lower level class" at Fig. 3, elements 96, 98.

As per claim 3, Greef teaches the method of arranging objects of claim 1,

wherein "the attribute comprises a distinctive domain value set" at Col. 12 lines 20-50

As per claim 4, Greef teaches the method of arranging objects of claim 1,

wherein "the class hierarchy further comprises a class below the lower level class in the

class hierarchy, and further comprising: inheriting of the attribute by the class" at Figs.

4-5 and Col. 12 lines 10-20.

As per claim 5, Greef teaches the method of arranging objects of claim 1, further

comprising: "expanding the class hierarchy horizontally by adding a class to the lower

level class; and inheriting of the attribute by the class" at Figs. 4-5 and Col. 12 lines10-

20.

As per claim 6, Greef teaches a hierarchical class architecture of objects

comprising:

- "an upper level class" at Fig. 3, element 88;

- "a lower level class" at Fig. 3, elements 92, 90; and

- "an attribute, wherein the attribute is assigned to the upper level class the objects

  are members of at least one of the upper level class and the lower level class,

  the attribute describes the objects, and the lower level class is configured to

  inherit the attribute" at Fig. 3, element 94 and Col. 12 lines 10-40.

As per claim 7, Greef teaches the hierarchical class architecture of claim 6,

further comprising: "an additional attribute, wherein the additional attribute is assigned

to the lower level class, and the attribute describes an object in the lower level class" at

Fig. 3, elements 96, 98.

As per claim 8, Greef teaches the hierarchical class architecture of claim 6,

wherein "the attribute comprises a distinctive domain value set" at Col. 12 lines 20-50.

As per claim 9, Greef teaches the hierarchical class architecture of claim 6,

further comprising: "a class, wherein the class is below the lower level class in the

hierarchical class architecture, and the class is configured to inherit the attribute" at

Figs. 4-5, elements 280, 282, 292, 294.

As per claim 10, Greef teaches the hierarchical class architecture of claim 6,

wherein "the lower level class is configured to be expanded horizontally by virtue of

being configured to provide for addition of a class, and the class is configured to inherit

the attribute" at Figs. 4-5 and Col. 12 lines 10-50.

As per claim 11, teaches a computer system comprising:

- "a processor, a computer readable medium coupled to the processor; and computer code, encoded in the computer readable medium, configured to cause the processor to: set a class hierarchy, wherein the class hierarchy comprises an upper level class and a lower level class" at Fig. 3 and Col. 33 lines 15-35;

- "the objects are members of at least one of the upper level class and the lower level class" at Fig. 3;

- "assign an attribute to the top level class, wherein the attribute describes the objects" at Fig. 3, element 94;

- "and provide inheritance of the attribute by the lower level class" at Col. 12 lines 10-20.

As per claim 12, Greef teaches the computer system of claim 11, wherein "the computer code is further configured to cause the processor to: "assign an attribute to the lower level class, the attribute describing an object that is a member of the lower level class" at Fig. 3, elements 96, 98.

As per claim 13, Greef teaches the computer system of claim 11, wherein "the attribute comprises a distinctive domain value set" at Col. 27, lines 30-45.

As per claim 14, Greef teaches the computer system of claim 11, wherein "the class hierarchy further comprises a class below the lower level class in the class hierarchy, and the computer code is further configured to cause the processor to: provide inheritance of the attribute by the class" at Fig. 5, elements 286, 288.

As per claim 15, Greef teaches the computer system of claim 11, wherein "the computer code is further configured to cause the processor to: expand the class hierarchy horizontally by adding a class to the lower level class; and provide inheritance of the attribute by the class" at Fig. 5, elements 298, 300.

As per claim 16, Greef teaches an apparatus for arranging objects comprising:

- "means for setting a class hierarchy, wherein the class hierarchy comprises an upper level class and a lower level class" at Fig. 3;

- "the objects are members of at least one of the upper level class and the lower level class" at Fig. 3;

- "means for assigning an attribute to the top level class, wherein the attribute describes the objects" at Fig. 3, element 94;

- "means for inheriting of the attribute by the lower level class" at Col. 12 lines 10-20.

As per claim 17, Greef teaches the apparatus of claim 16, further comprising:

- "means for assigning an attribute to the lower level class, the attribute describing an object that is a member of the lower level class" at Fig. 3, elements 96, 98;

As per claim 18, Greef teaches the apparatus of claim 16, wherein "the attribute comprises a distinctive domain value set" at Col. 27 lines 30-45.

As per claim 19, Greef teaches the apparatus of claim 16, wherein "the class hierarchy further comprises a class below the lower level class in the class hierarchy, and further comprising: means for inheriting of the attribute by the class" at Fig. 5, elements 286, 288.

As per claim 20, Greef teaches the apparatus of claim 16, further comprising: "means for expanding the class hierarchy horizontally by adding a class to the lower level class; and means for inheriting of the attribute by the class" at Fig. 5, elements 298, 300 and Col. 12 lines 10-20.

As per claim 21, Greef teaches a computer program product, encoded in computer readable media, comprising:

- "a first set of instructions, executable on a computer system, configured to set a class hierarchy, wherein the class hierarchy comprises an upper level class and a lower level class, and the objects are members of at least one of the upper level class and the lower level class" at Col. 12 lines 10-50 and Fig. 3;

- "a second set of instructions, executable on the computer system, configured to assign an attribute to the top level class, wherein the attribute describes the objects" at Fig. 3, element 94;

- "a third set of instructions, executable on the computer system, configured to provide inheritance of the attribute by the lower level class" at Col. 12 lines 10-20;

As per claim 22, Greef teaches the computer program product of claim 21, further comprising: "a fourth set of instructions, executable on the computer system, configured to assign an attribute to the lower level class, the attribute describing an object that is a member of the lower level class" at Fig. 3, elements 96, 98.

As per claim 23, Greef teaches the computer program product of claim 21, wherein "the attribute comprises a distinctive domain value set" at Fig. 3, elements 94, 96, 98.

As per claim 24, Greef teaches the computer program product of claim 21, wherein "the class hierarchy further comprises a class below the lower level class in the class hierarchy, and further comprising: a fourth set of instructions, executable on the computer system, configured to provide inheritance of the attribute by the class" at Figs. 4-5, elements 286, 288.

As per claim 25, Greef teaches the computer program product of claim 21, further comprising: "a fourth set of instructions, executable on the computer system, configured to expand the class hierarchy horizontally by adding a class to the lower level class; and a fifth set of instructions, executable on the computer system, configured to provide inheritance of the attribute by the class" at Figs. 4-5 elements 286, 288.

Conclusion

5.   The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is **(703) 305-9601** for faster service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (703) 308-

7299. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703) 305-9790. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)746-7240.

                                        Khanh B. Pham
                                        Examiner
                                        Art Unit 2177

KBP
July 10, 2003

JEAN R. HOMERE
PRIMARY EXAMINER